Light efficiency:

133 Lumen/Watt

Light quality:

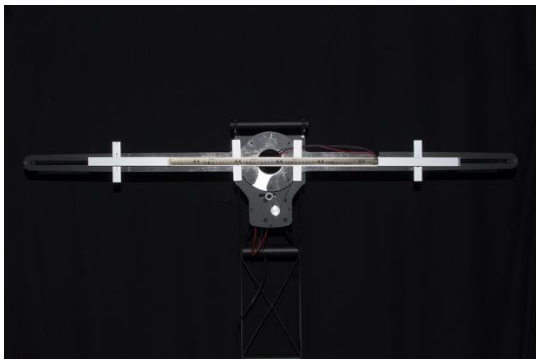
CRI: 0,0

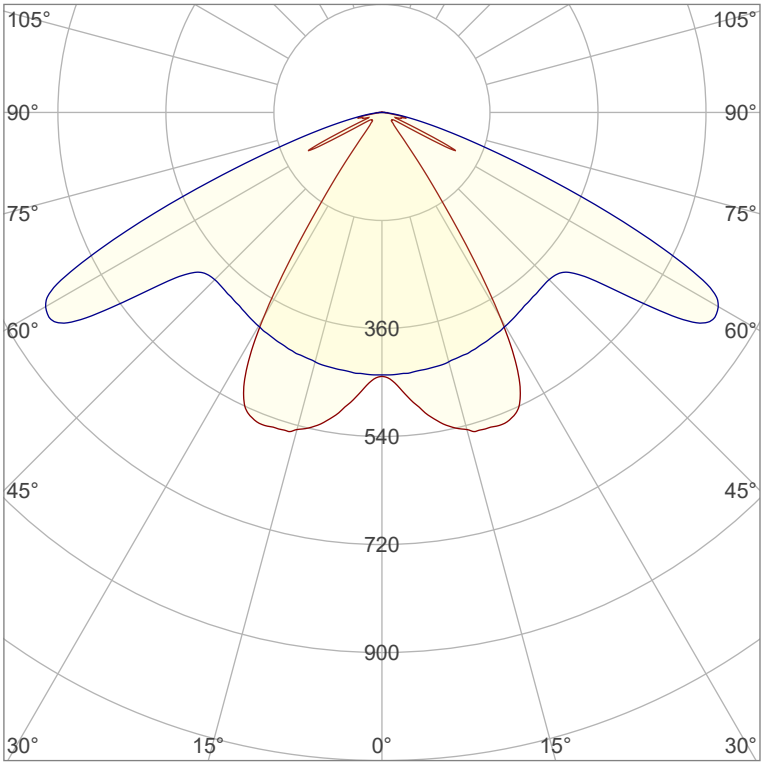
Color temperature:

0 K

Output: 1021 lm
Peak: 651 cd

Power: 7,7 W
PF: 1,0





Product name:
Defiant-3_510mm_XXG_Lens-60°-Transparent

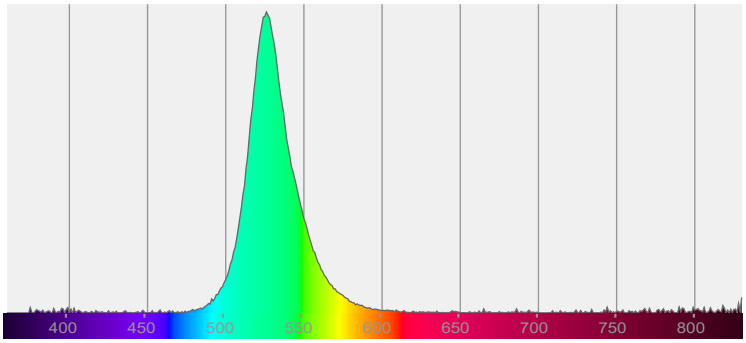
Item number:
NP/L3C/22C/0510/XXG/L6T

Date and time:
07.07.2020 13:42:33

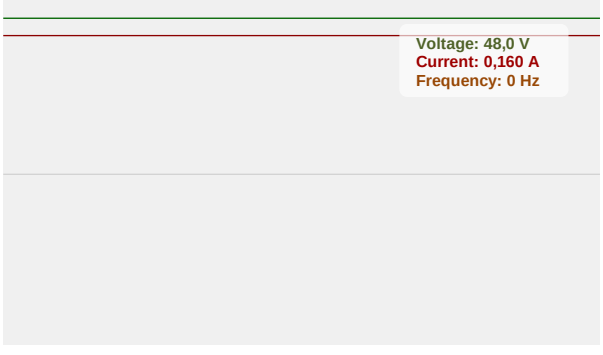
Description:
Toleranzen:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 K
CRI +/-0,7
Angular Resolution 1 Grad Step
Last Calibration 20.05.2020
Pruefer:
Peter Ulrich
Pruefort:
Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

CIE 1931
x: 0,199
y: 0,734

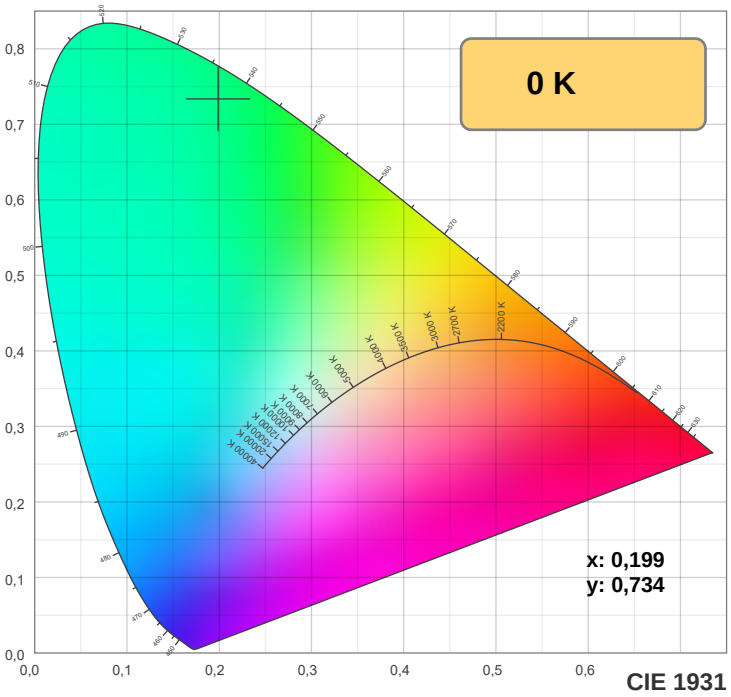
Spectra



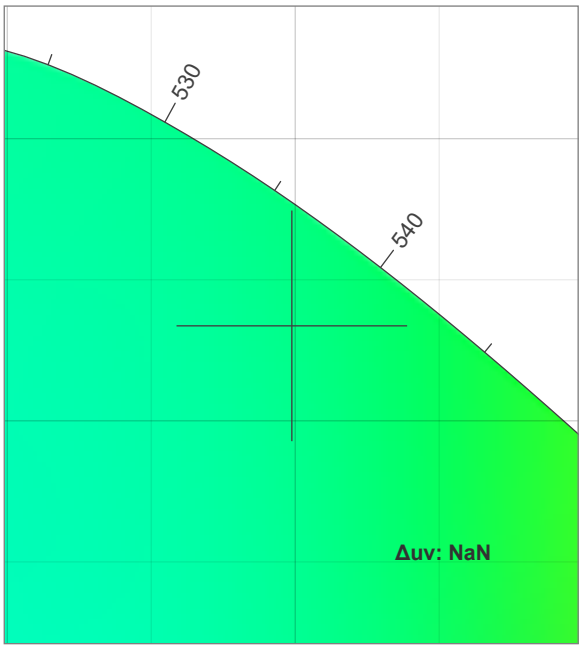
Power



Color details

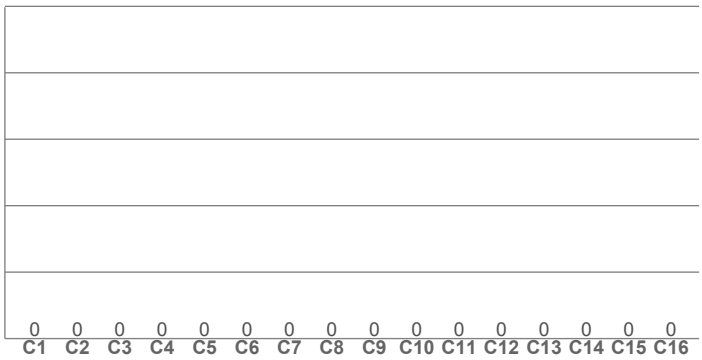


CIE 1931

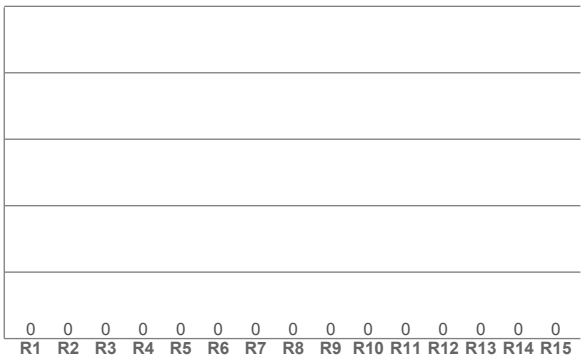


CIE 1931 ZOOM

TM30: 0,0



CRI: 0,0 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

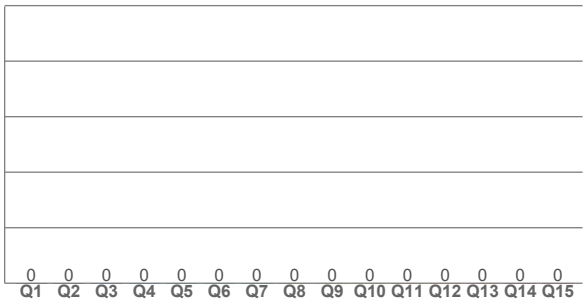
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

CQS: 0,0



Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
0 K	0,0	0,0	0,0	0,0	0,0	0,199	0,734	0,070	0,386	NaN

TM30 details

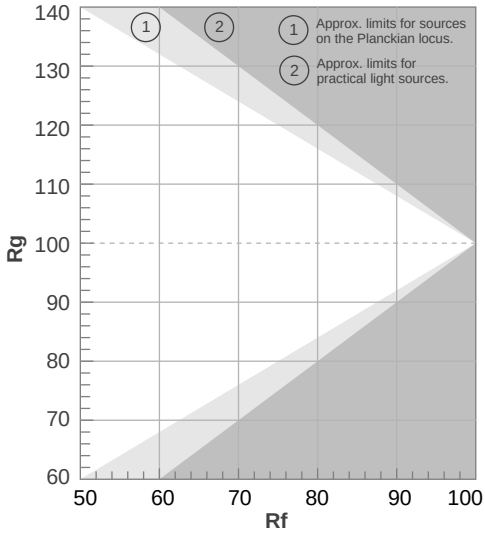
Rf 0,0

Fidelity index Rf

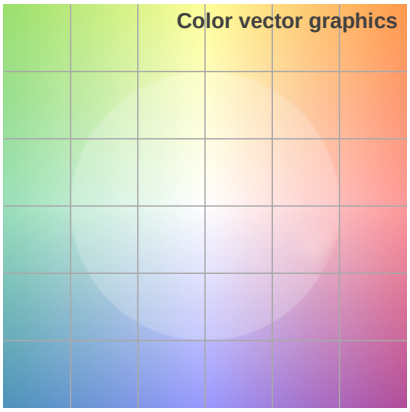
Rg 0,0

Gammut index Rg

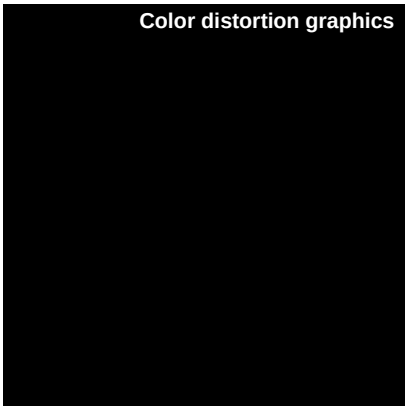
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	0%

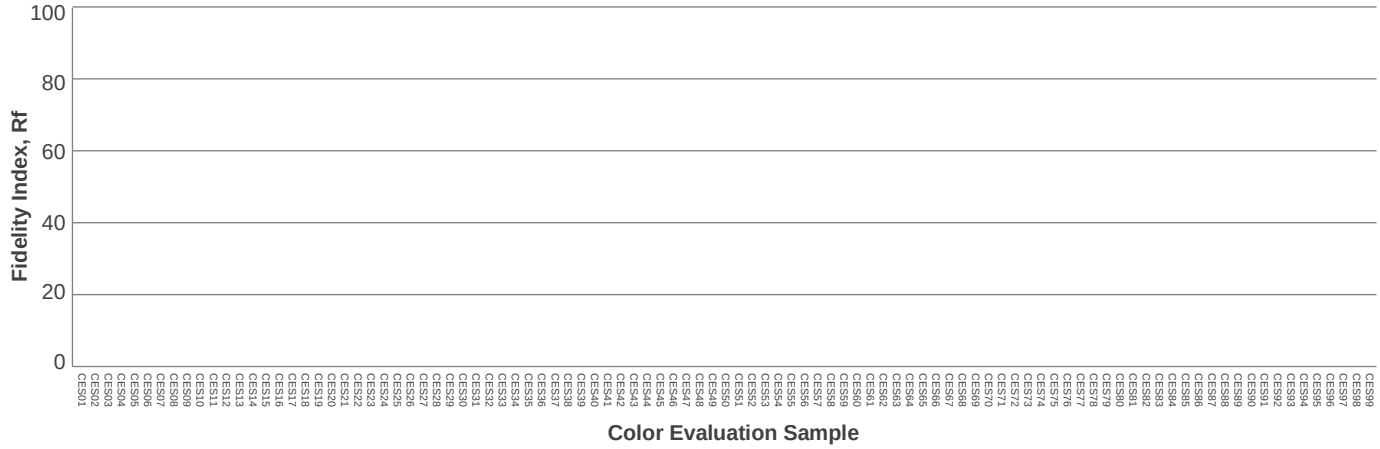




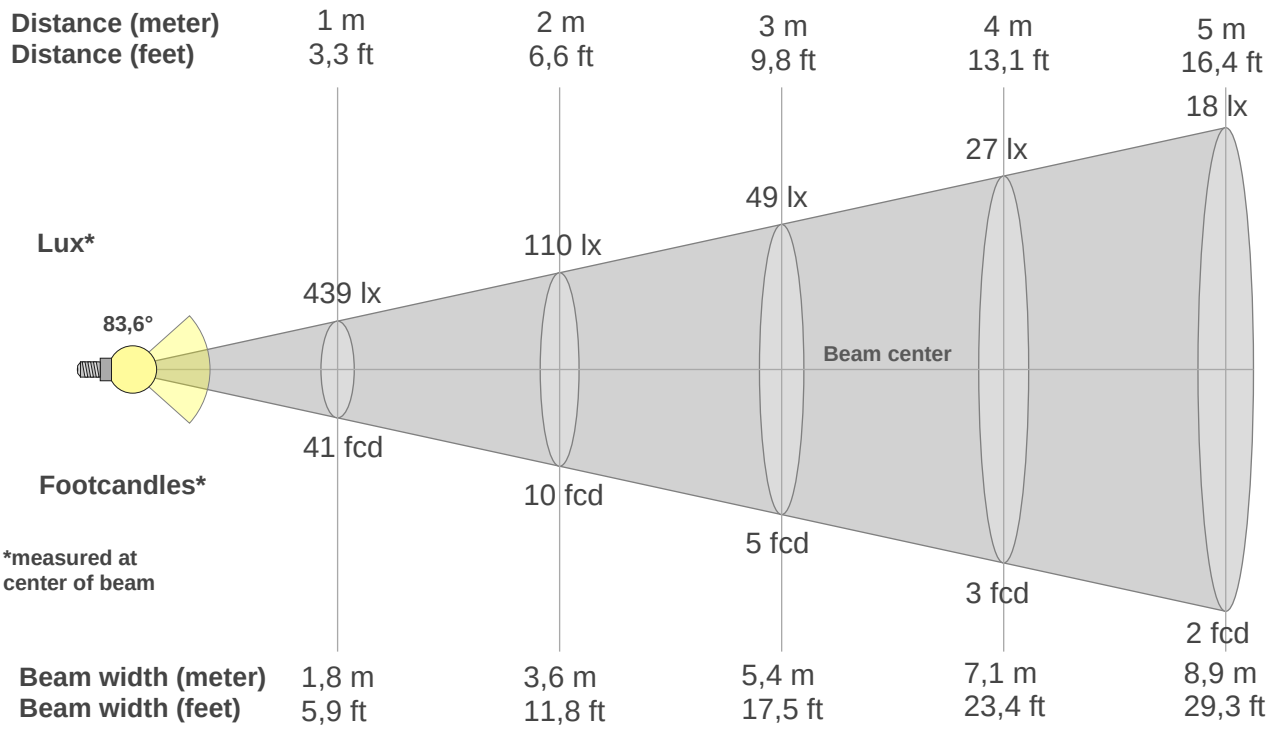








Beam details



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	19,7ft	23ft	26,2ft	29,5ft	32,8ft	36,1ft	39,4ft	42,7ft	45,9ft	49,2ft	52,5ft	55,8ft	59,1ft	62,3ft	65,6ft
439lx	110lx	49lx	27lx	18lx	12lx	9lx	7lx	5lx	4lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx
40,7fcd	10,2fcd	4,5fcd	2,5fcd	1,6fcd	1,1fcd	0,8fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
439	474	521	547	556	540	394	145	45	27	21	21	52	69	26	34	24	6	2	0
100%	108%	119%	125%	127%	123%	90%	33%	10%	6%	5%	5%	12%	16%	6%	8%	5%	1%	0%	0%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
439	436	434	430	426	419	411	403	397	394	417	590	647	475	227	96	36	11	1	1
100%	100%	99%	98%	97%	95%	94%	92%	90%	90%	95%	135%	147%	108%	52%	22%	8%	3%	0%	0%

Intensities in 180° c-plane

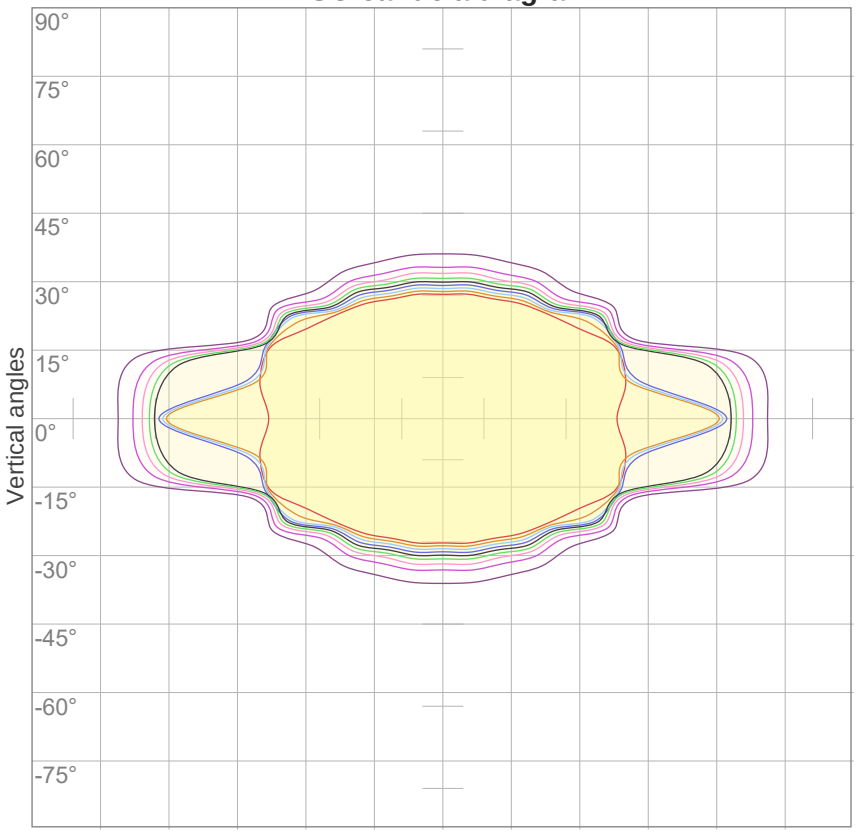
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
439	474	521	547	556	540	394	145	45	27	21	21	52	69	26	34	24	6	2	0
100%	108%	119%	125%	127%	123%	90%	33%	10%	6%	5%	5%	12%	16%	6%	8%	5%	1%	0%	0%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
439	436	434	430	426	419	411	403	397	394	417	590	647	475	227	96	36	11	1	1
100%	100%	99%	98%	97%	95%	94%	92%	90%	90%	95%	135%	147%	108%	52%	22%	8%	3%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
83,6°	**129,5°**	**153,3°**	**85,7%**	**73,3%**

ISO candela diagram



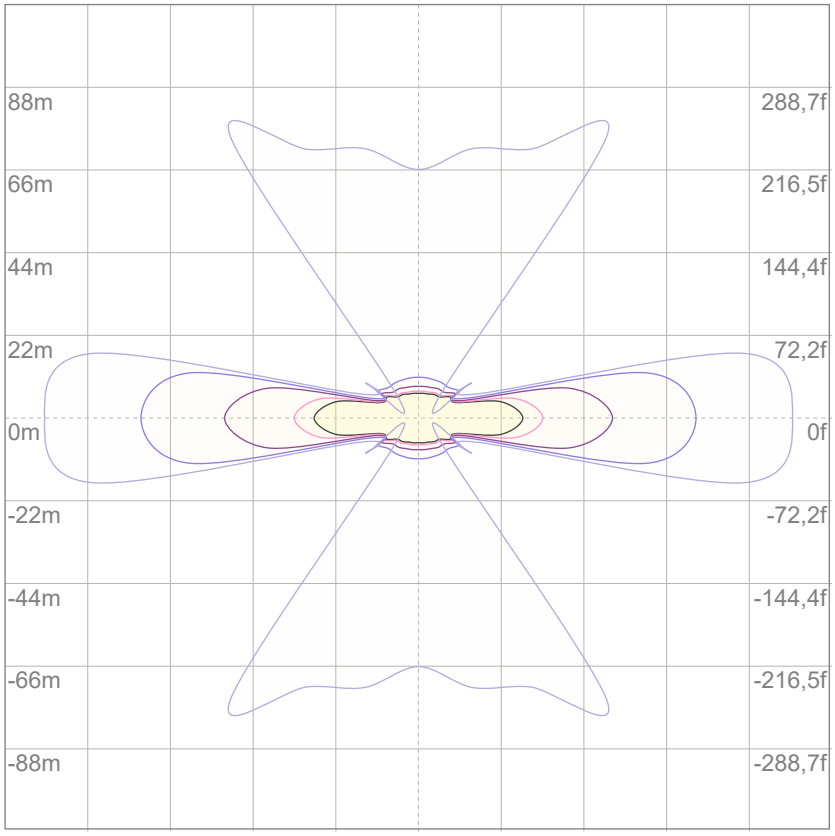
10%	44 cd
20%	88 cd
30%	132 cd
40%	175 cd
50%	219 cd
60%	263 cd
70%	307 cd
80%	351 cd
90%	395 cd

Conditions:

Number of c-planes: 16

Candela at center: 439 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

3%	0,132 lx
5%	0,219 lx
10%	0,439 lx
30%	1,32 lx
50%	2,19 lx

Conditions:

Number of c-planes: 16

Lux at center: 4,39 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

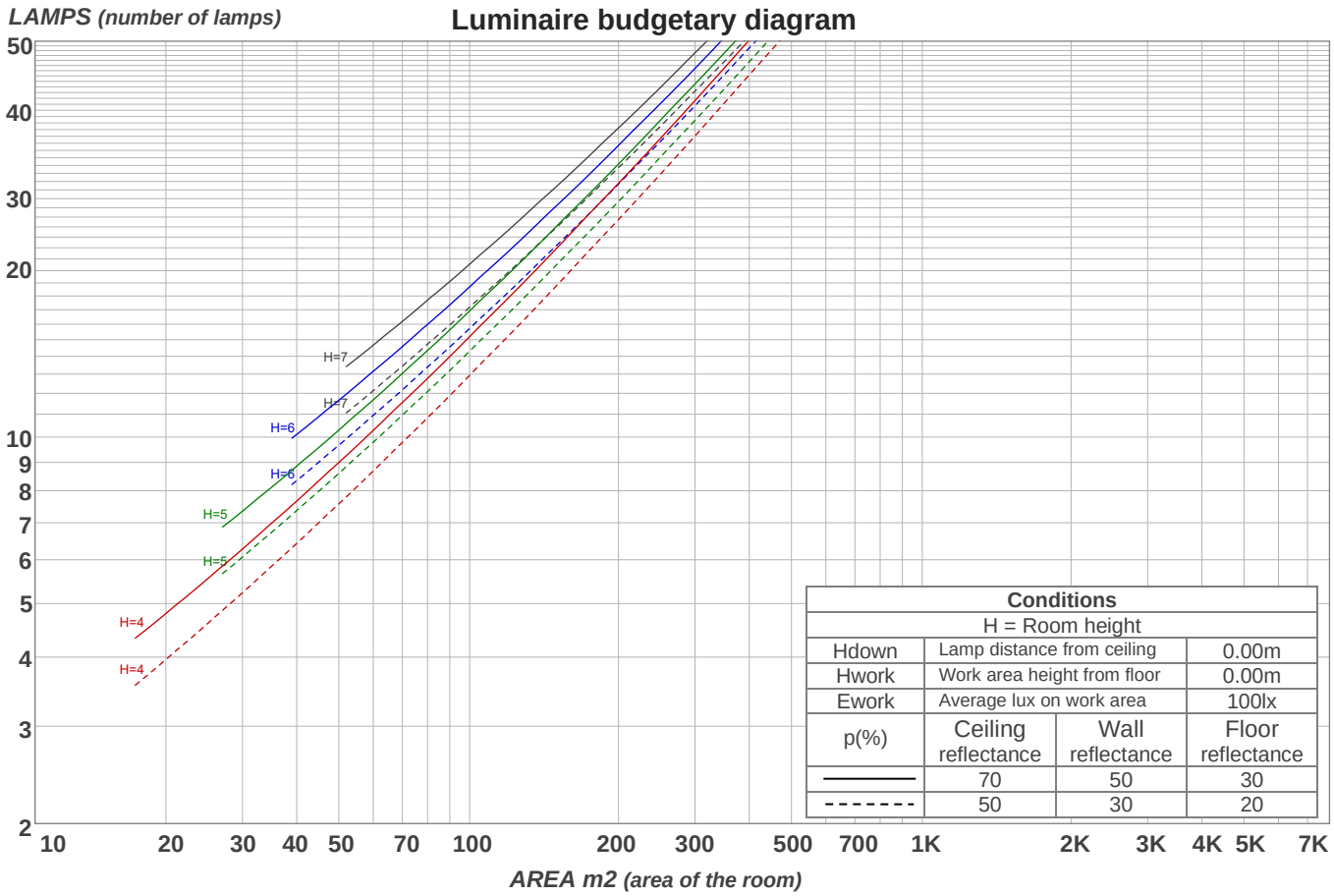
Glare Evaluation According to UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X	Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	16,2	17,2	16,4	17,5	17,7	27,5	28,5	27,7	28,8	29,0
	3H	17,5	18,6	17,9	18,8	19,0	29,0	30,1	29,4	30,4	30,6
	4H	18,0	19,0	18,4	19,3	19,5	29,3	30,3	29,7	30,5	30,8
	6H	18,8	19,7	19,1	20,0	20,3	29,4	30,3	29,7	30,6	30,9
	8H	18,8	19,7	19,2	20,0	20,4	29,4	30,2	29,7	30,5	31,0
	12H	18,8	19,7	19,2	20,0	20,4	29,3	30,2	29,7	30,5	31,0
4H	2H	16,4	17,4	16,8	17,7	18,0	27,1	28,2	27,5	28,4	28,7
	3H	18,1	18,9	18,4	19,3	19,7	28,9	29,7	29,2	30,0	30,5
	4H	18,6	19,4	19,1	19,8	20,4	29,0	29,8	29,5	30,2	30,7
	6H	19,6	20,4	20,1	20,7	21,1	29,1	29,9	29,6	30,2	30,6
	8H	19,7	20,4	20,2	20,8	21,1	29,1	29,8	29,6	30,2	30,5
	12H	19,7	20,3	20,2	20,7	21,2	29,1	29,7	29,6	30,1	30,5
8H	4H	18,8	19,5	19,3	19,8	20,2	28,9	29,6	29,4	30,0	30,3
	6H	20,0	20,5	20,5	21,0	21,5	29,0	29,5	29,5	30,0	30,5
	8H	20,2	20,6	20,7	21,2	21,8	29,1	29,5	29,6	30,0	30,7
	12H	20,2	20,6	20,8	21,1	21,7	29,1	29,4	29,7	29,9	30,5
12H	4H	18,8	19,4	19,3	19,8	20,2	28,9	29,4	29,4	29,8	30,3
	6H	20,1	20,5	20,6	21,1	21,7	29,0	29,5	29,5	30,0	30,6
	8H	20,3	20,7	20,9	21,2	21,8	29,0	29,4	29,6	29,9	30,5
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,8 / -1,2					1,7 / -2,5				
S = 1.5H		2,4 / -1,7					3,4 / -6,1				
S = 2.0H		2,7 / -1,9					5,1 / -8,4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1021 lm total luminous flux											

Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio)				Room Values are expressed as percentage of Lumens delivered to the task surface													
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	92	90	89	87
2	102	95	89	85	100	93	88	83	90	85	81	86	83	80	83	80	78	76
3	95	86	79	73	92	84	78	72	81	76	71	78	74	70	76	72	69	67
4	88	77	70	64	86	76	69	64	74	68	63	71	66	62	69	65	61	59
5	82	70	63	57	80	69	62	56	67	61	56	65	60	55	63	59	55	53
6	76	64	57	51	74	64	56	51	62	55	50	60	54	50	59	53	49	47
7	71	59	51	46	70	58	51	46	57	50	45	55	50	45	54	49	45	43
8	67	55	47	42	65	54	47	42	53	46	41	51	45	41	50	45	41	39
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	38	35	33

Luminaire budgetary diagram

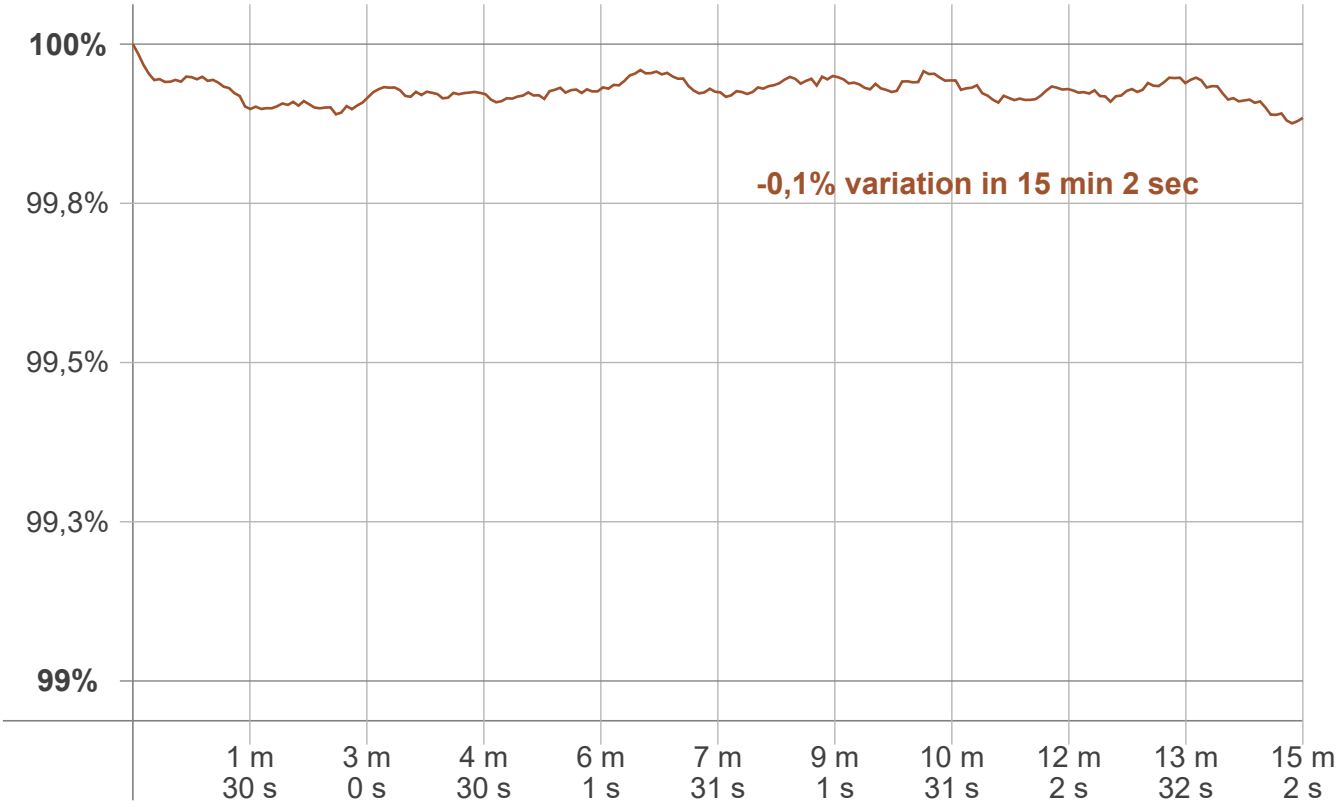


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
44,5 lm	144 lm	241 lm	233 lm	133 lm	79,2 lm	90,3 lm	36,3 lm	11,7 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
1,97 lm	1,71 lm	1,40 lm	0,947 lm	0,632 lm	0,464 lm	0,342 lm	0,209 lm	0,071 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 15 min 2 sec**
Warmup variation	**-0,1%**

Warmup conditions

Stable period:	**15 min**
Stable change max:	**2,0%**
Minimum time:	**15 min**

Color temperature change

CCT start	CCT change	CCT end
0 K	0 K	0 K

Output change

Output start	Output change	Output end
1022 lm	-1 lm	1021 lm